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10/709,382	04/30/2004	Michael P. Schoemann	MASL-37	3381

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EXAMINER

PATEL, KIRAN B

ART UNIT PAPER NUMBER

3612

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/709,382

Filing Date: April 30, 2004

Appellant(s): Michael P. Schoemann et al.

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Steven W. Benintendi  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/23/06 appealing from the Office action mailed 3/27/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

US 6,821,465	Stein et al.	11-2004
JP-2000-264361A		3-1999

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 8-10, 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (6,821,465) in view of Japan (JP 2000-264361).

Regarding claims 1-2, 8-10, 15, Stein et al. (6,821,465) discloses the invention as claimed to include a body including a door, a door trim panel 10, the door trim panel including a cover stock 22; an armrest 12 coupled to the cover stock and having a first density 14; an upper energy absorber Fig 2 disposed above the armrest and having a second density 16 higher than the first density; and a lower energy absorber Fig 2 disposed below the armrest and having a third density 16 higher than the first density; wherein the second and third densities are substantially equal.

However, Stein et al. (6,821,465) does not disclose the foam to be polyolefin bead foam.

Japan (JP 2000-264361) discloses the foam to be polyolefin bead foam.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention, as disclosed by Stein et al. (6,821,465), to include the foam to be polyolefin bead foam, as disclosed by Japan (JP 2000-264361), to provide the door trim panel to include the armrest with energy absorbers with excellent shock absorbing buffer taught by Japan (JP 2000-264361).

2. Claim(s) 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (6,821,465) as applied to claim 1 and further in view of ordinary skill in the art.

Regarding Claim(s) 22-26, Stein et al. (6,821,465) discloses the invention as claimed.

However, Stein et al. (6,821,465) does not disclose varied ranges of densities for the first, second and third densities.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide varied ranges of densities for the first, second and third densities, since it has been held to be within the general skill of a worker in the art to use the available foam with required density as specified by the design specification which would provide the desired level of protection for the passengers in the event of a side impact.

#### **(10) Response to Argument**

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Polyolefin bead foam is used to provide an armrest with excellent shock absorbing properties as taught by Japan (JP 2000-264361).

In response to applicant's argument that Japan (JP 2000-264361) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. *See In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the particular problem with which applicant was concerned was energy absorber (shock absorber).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. *See In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).


#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Application/Control Number: 10/709,382  
Art Unit: 3612

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Respectfully submitted,

  
Kiran B. Patel P.E.  
Primary Examiner  
Art Unit 3612

KBP

November 13, 2006

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**Disclaimer:**

This English translation is produced by machine translation and may contain errors. The JPO, the NCIP, and those who drafted this document in the original language are not responsible for the result of the translation.

**Notes:**

1. Untranslatable words are replaced with asterisks (\*\*\*\*).
2. Texts in the figures are not translated and shown as it is.

Translated: 03:01:21 JST 11/14/2006

Dictionary: Last updated 11/10/2006 / Priority:

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**FULL CONTENTS**

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**[Claim(s)]**

[Claim 1] In foaming magnification, five to 45 times and compressive strength [ with the polyolefin system bead foaming object of 0.069-1.08MPa ] [ it is constituted by L type to which addressing obtains at the corner of the outer frame of a sash and which can do things, and ] The plug slot where the flange for attachment which projects on the perimeter of an outer frame is inserted is formed in the inner side corner side where addressing breaks to the outer frame, and with an inner side corner side [ the outside corner side by the side of opposite ] The protective layer for sashes characterized by forming the band slot in which the stop band twisted in the direction of a circumference of an outer frame is accommodated.

[Claim 2] While making cross-sectional V type, the plug slot along the length direction alternately with right and left The protective layer for sashes according to claim 1 characterized by for the plane circle-like projection part having projected inside, and for the front of this projection part having stood at right angles to a plug inside of a slot moreover, and having continued and projected from the upper end of a plug slot to the depth direction intermediate part.

[Claim 3] In foaming magnification, five to 45 times and compressive strength [ with the polyolefin system bead foaming object of 0.069-1.08MPa ] [ it is constituted by L type to which pulls and addressing obtains at the corner of the window frame of a different type or a door type sash and which can do things, and ] The protective layer for sashes characterized by forming in the window frame the receptacle crevice which accommodates the corner part of a window frame in the inner side corner side where addressing breaks, and forming the band slot which accommodates the stop band twisted in the direction of a circumference of an outer frame in the outside corner side by the side of opposite with an inner side corner side.

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**[Detailed Description of the Invention]**

[0001]

[The technical field to which invention belongs] This invention relates to the protective layer for sashes for protecting this from a shock at the time of transportation of the sash used for a window, a partition, etc. Furthermore, it is related with the protective layer for sashes to which addressing is divided into the corner

part of the outer frame of a sash, or a window frame (usually with glass) in detail.

[0002]

[Description of the Prior Art] what it is stabilized in corner parts, such as a window frame of a sash, addressing obtains as a protective layer for sashes combining corrugated paper and styrene foam, and things could be made to do is known conventionally (JP,H7-330011,A). moreover, the protective layer for sashes constituted to L type as for which addressing obtains in corner parts, such as a window frame of a sash, and things are made to them with styrene foam is also used partly.

[0003]

[Problem to be solved by the invention] However, since use of the above-mentioned conventional protective layer for sashes is [ / each ] impossible and it is thrown away, it is inadequate in respect of the viewpoint of environmental protection, or transportation cost. Moreover, it cannot be said as thing sufficient about protection performance. That is, corrugated paper and styrene foam break or break easily, are rubbing against the window frame of about [ not bearing two or more use ] and a sash etc., and tend to attach a scratch mark to this.

[0004] This invention is equal to repetition use, and aims at offering the protective layer for sashes which moreover cannot attach a scratch mark to a sash easily while it was made in view of the above-mentioned conventional problem and is excellent in the buffer performance.

[0005]

[Means for solving problem] Foaming magnifications are [ five to 45 times and compressive strength of this invention ] the polyolefin system bead foaming objects of 0.069-1.08MPa because of the above-mentioned purpose. [ it is constituted by L type to which addressing obtains at the corner of the outer frame of a sash and which can do things, and ] The plug slot where the flange for attachment which projects on the perimeter of an outer frame is inserted is formed in the inner side corner side where addressing breaks to the outer frame, and with an inner side corner side [ the outside corner side by the side of opposite ] [ with the protective layer for sashes characterized by forming the band slot in which the stop band twisted in the direction of a circumference of an outer frame is accommodated, and the same polyolefin system bead foaming object as the above ] [ it is constituted by L type to which pulls and addressing obtains at the corner of the window frame of a different type or a door type sash and which can do things, and ] The receptacle crevice which accommodates the corner part of a window frame in the inner side corner side where addressing breaks is formed in the window frame, and with an inner side corner side [ the outside corner side by the side of opposite ] The protective layer for sashes characterized by forming the band slot in which the stop band twisted in the direction of a circumference of an outer frame is accommodated is offered.

[0006]

[Mode for carrying out the invention] First, based on drawing 1 - drawing 4 , the protective layer A for sashes concerning an example of this invention is explained.

[0007] The protective layer A for sashes of this example pulls, and is suitable for the outer frame 1 of a different type sash. It pulls, addressing is divided into each corner of the outer frame 1 of a different type sash, and the protective layer A for these sashes is constituted by L type with the polyolefin system bead foaming object, as shown in drawing 1 .

[0008] [ the polyolefin system bead foaming object which constitutes this protective layer A for sashes ] It is

polyethylene, polypropylene, or a foaming object using the bead of the copolymer as for which more than 50 weight parts contain these, and it is required for the foaming magnification to be five to 45 and for compressive strength to be 0.069-1.08MPa. As compared with the styrene foam currently used conventionally, while a polyolefin system bead foaming object has the smooth surface, the waist is strong and it is sticky. Therefore, even if it rubs, a scratch mark is not easily attached to an outer frame 1, and moreover it is hard to be divided, and can be equal to repetition use. When this invention person etc. tries, it is checked that it is equal to tens of repetition use. Moreover, the above-mentioned foaming magnification and compressive strength are for preventing that the stop band (not shown) mentioned later eats away while obtaining the outstanding buffer performance.

[0009] In addition, it consists of the polyolefin system bead foaming objects same also about the charges B and C for sashes of a protective layer later mentioned as other examples as the above.

[0010] Two plug slots 2 on the narrow width are parallel, and are formed in the inner side corner side which is a near field where addressing breaks to the outer frame 1 of the protective layer A for sashes which makes L type as clearly shown by drawing 2. This plug slot 2 is for inserting and holding the flange 3 for attachment projected since an outer frame 1 is fixed to a building on the perimeter of an outer frame 1.

[0011] By the way, a position is [ position of the flange 3 for attachment in an outer frame 1 ] somewhat different with a maker etc. Moreover, in order that it may pull and the outer frame 1 of a different type sash may hold the window frame of two sheets to a pull difference, width is wide, and the width of the protective layer A for these sashes will also become large inevitably. When enabling it to use the protective layer A for sashes which formed one plug slot 2 to the outer frame 1 which is two or more kinds from which the position of the flange 3 for attachment is different, It is necessary to make still larger width of the protective layer A for sashes so that an outer frame 1 may not overflow the protective layer A for sashes, even if the position of the flange 3 for attachment is different. However, it corresponds to the difference in the position of the flange 3 for attachment like this example. The same protective layer A for sashes can be used to the outer frame 1 which is two or more kinds from which the position of the flange 3 for attachment is different, without expanding the width of the protective layer A for sashes so much, if two plug slots (it can also carry out to three or more.) 2 are formed.

[0012] The plug slot 2 is making cross-sectional V type, and, moreover, the plane circle-like projection part 4 has projected it inside alternately with right and left along the length direction so that clearly from drawing 2 - drawing 4. As for this projection part 4, that front (field inside the plug slot 2) stands perpendicularly in the plug slot 2 which makes cross-sectional V type, and it is continued and projected from the upper end of the plug slot 2 to the intermediate part (preferably  $1/2 - 2/3$  of the depth) of the depth direction. [ of the plug slot 2 ] If it is the plug slot 2 which has such a projection part 4, even if the thickness of the flange 3 for attachment changes somewhat with differences in a maker etc., the inserted flange 3 for attachment can be certainly pinched from the right and left by the elastic deformation of each projection part 4.

[0013] [ the outside corner side (an inner side corner side is an opposite side) of the protective layer A for sashes ] As shown in drawing 1, address the protective layer A for these sashes to the four corners of an outer frame 1, and in the state of \*\*\*\*\* When it stops in the direction of a circumference of an outer frame 1, a band (not shown) is twisted and the protective layer A for these sashes is fixed to an outer frame 1 from on the protective layer A for these sashes of four corners, the band slot 5 of two articles for accommodating this

stop band and preventing the gap is formed. Moreover, the band slot 6 of one articles is formed also in the direction which intersects perpendicularly with this band slot 5. In the state of drawing 1 , when this band slot 6 is stopped in the direction of outer frame order from on the protective layer A for sashes of the right and left located up and down and twists a band, it accommodates this stop band.

[0014] Drawing 5 is the perspective view showing the protective layer B for sashes concerning other examples of this invention, and has become what was especially suitable to the outer frame (not shown) of a door type sash to being what the protective layer A for sashes mentioned above pulled, and was suitable to the outer frame 1 of a different type sash. What is necessary is for the type of usage to be the same as that of explanation by drawing 1 , to transpose the outer frame 1 in drawing 1 to the outer frame of a door type sash, to transpose the flange 3 for attachment to the flange for attachment in the outer frame of a door type sash, and just to apply it. Therefore, the protective layer B for these sashes is the thing which the projection part 4 projected and which inserts and has a slot 2, the band slot 5, and 6 like the above-mentioned protective layer A for sashes. however, since the flange for attachment in a door type sash is projected and made into the position of about 1 law even if a maker etc. is different, the plug slot 2 in the protective layer B for these sashes is one articles.

[0015] Drawing 6 is the perspective view showing the protective layer C for sashes concerning the example of further others of this invention, and has become what pulled especially and was suitable to the window frame (it is illustrated and there is \*\*\*\*\* as for nothing) of a different type or a door type sash. That is, the receptacle crevice 7 to which the protective layer C for these sashes accommodates the corner part of a window frame in the inner side corner side where addressing breaks to a window frame was formed. and it is the business for which addressing obtains in the state where it was stabilized in the corner part of the window frame and which can do things by the corner part of a window frame being inserted in this receptacle crevice 7. Moreover, since it has structure which does not shift in the direction of window frame order by the corner part of a window frame winning popularity and being inserted in a crevice 7, only the band slot 5 in which the stop band twisted in the direction of a circumference of a window frame is accommodated is established in the outside corner side.

[0016]

[Effect of the Invention] This invention is a thing as explained above, and it is equal to repetition use, and a high buffering effect is not only acquired, but even if it rubs against each part of the sash which should moreover be protected, there is no possibility of attaching a scratch mark.

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#### [Brief Description of the Drawings]

[Drawing 1] It is the perspective view in which pulling the protective layer for sashes concerning an example of this invention, and showing each addressing \*\*\*\*\* state to corner part 2 of the outer frame of a different type sash.

[Drawing 2] It is the expansion perspective view of the protective layer for sashes shown in drawing 1 .

[Drawing 3] It is an expanded sectional view near [ which is shown in drawing 2 ] the plug slot of the protective layer for sashes.

[Drawing 4] It is the expanded sectional view showing the state where pulled the protective layer for sashes shown in drawing 2 , and it attached to the outer frame of a different type sash.

[Drawing 5] It is the perspective view of the protective layer for sashes concerning other examples of this invention.

[Drawing 6] It is the perspective view of the protective layer for sashes concerning the example of further others of this invention.

[Explanations of letters or numerals]

1 Pull and it is Outer Frame of Different Type Sash.

2 Plug Slot

3 Flange for Attachment

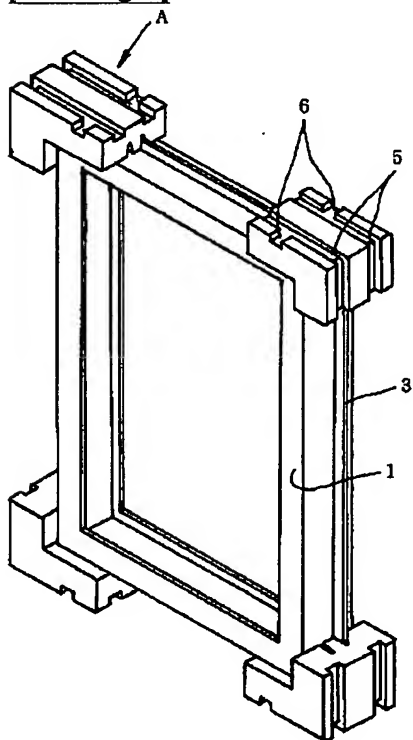
4 Projection Part

5 Band Slot

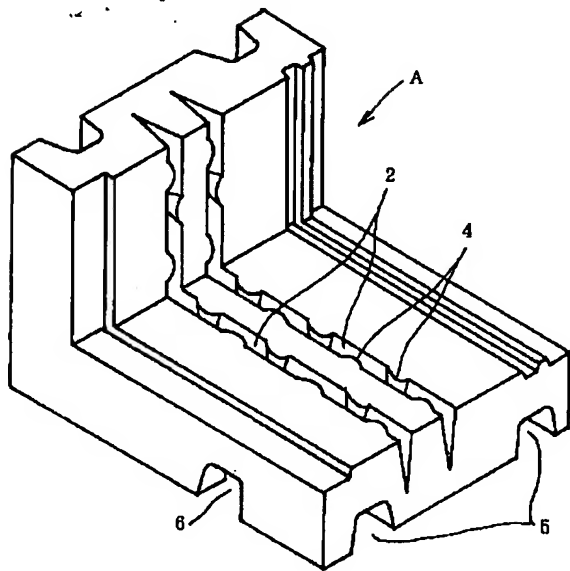
6 Band Slot

7 Receptacle Crevice

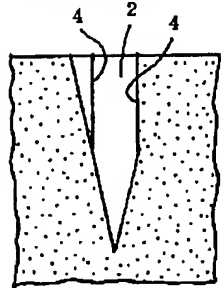
[Drawing 1]



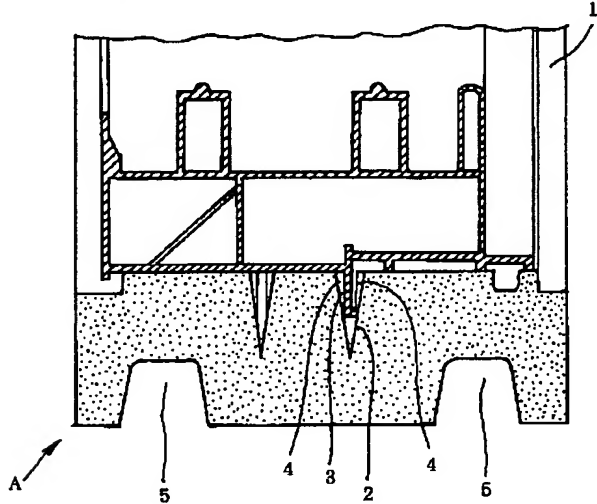
[Drawing 2]



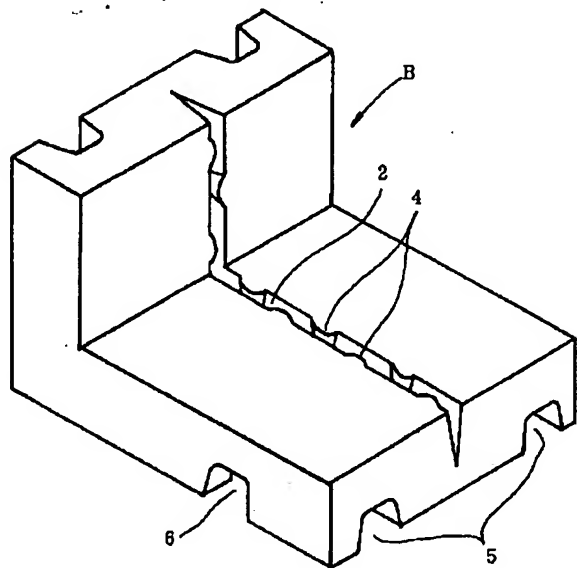
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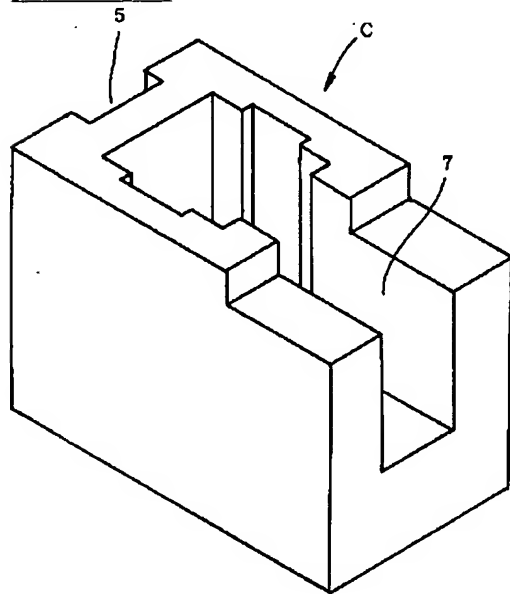
[Drawing 4]



[Drawing 5]



[Drawing 6]



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[Translation done.]